

# **EXHIBIT 41**



Howard Croft <hcroft@cityofflint.com>

## Fwd: Urgent: Independent Flint Water Tests

5 messages

Dayne Walling <dwalling@cityofflint.com>

Mon, Aug 31, 2015 at 11:48 AM

To: Natasha Henderson <nhenderson@cityofflint.com>, Howard Croft <hcroft@cityofflint.com>

Here is info from Curt Goyette at ACLU

I suggest that Howard reach out to Virginia Tech directly and find out more about their inquiry and see what DEQ and EPA has to say.

----- Forwarded message -----

From: **Flint Mayor** <mayor@cityofflint.com>

Date: Mon, Aug 31, 2015 at 11:18 AM

Subject: Fwd: Urgent: Independent Flint Water Tests

To: Dayne Walling <dwalling@cityofflint.com>

----- Forwarded message -----

From: **Curt Guyette** <cguyette@aclumich.org>

Date: Mon, Aug 31, 2015 at 10:37 AM

Subject: Urgent: Independent Flint Water Tests

To: "mayor@cityofflint.com" <mayor@cityofflint.com>

Mayor,

Prof. Marc Edwards of Virginia Tech university has been leading a research project to conduct an independent study of lead in Flint's water. Working with a group of city residents, they have been collecting water samples from homes throughout the city. The study is still under way, but the results so far have been so disturbing that VT has begun posting results on the web in order to alert residents about how serious the problem may be.

This is what VT is reporting:

**EXHIBIT**

**Croft 57**

exhibitsticker.com

Over the weekend we analyzed another 72 lead samples collected by Flint residents and mailed to VT. For the 120 samples analyzed to date, **forty two percent were over 5 ppb**, which suggests a serious lead in water problem according to our experience and criteria. Twenty-three (20% of those collected) also exceeded 15 ppb lead, suggesting a serious lead in water problem. **That is, the Flint Citizen Science study to date, is finding results worse than the EPA standard which is applied to sampling "worst case" homes.** The highest lead sampled in first draw so far was 158 ppb, and the highest sample after 45 second flushing is 1051 ppb. Six of 120 homes sampled (5%), had over 15 ppb lead even after 2 minutes of continuous flushing. **The 90% 'ile lead level in the Flint Water Study is currently 30 ppb, which is double the EPA standard applied to "worst case" homes, and in a range where water consumption has caused lead poisoning in children and adverse pregnancy outcomes.** Needless to say, these data are very worrisome.

Here is the website containing the information.

**I am writing about this for a story that will be posted tomorrow. If the city chooses to respond, I need to hear back from you by the end of the day today, Aug. 31.**

Sincerely,

Curt Guyette

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Dayne Walling  
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**Howard Croft** <[hcroft@cityofflint.com](mailto:hcroft@cityofflint.com)>

Mon, Aug 31, 2015 at 12:05 PM

To: Dayne Walling <[dwalling@cityofflint.com](mailto:dwalling@cityofflint.com)>

Cc: Natasha Henderson <[nhenderson@cityofflint.com](mailto:nhenderson@cityofflint.com)>, Michael Glasgow <[mglasgow@cityofflint.com](mailto:mglasgow@cityofflint.com)>

Mayor,

Mike Glasgow is familiar with Professor Edwards and we can reach out to him today and gather the most recent information coming out of VT.

[Quoted text hidden]

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**Howard Croft**  
Public Works Director  
City of Flint  
1101 S. Saginaw Street  
Flint, MI 48502  
PH# 810.766.7135 Ext.2043  
[hcroft@cityofflint.com](mailto:hcroft@cityofflint.com)

**Dayne Walling** <dwalling@cityofflint.com>

Mon, Aug 31, 2015 at 12:07 PM

To: Howard Croft <hcroft@cityofflint.com>

Cc: Natasha Henderson <nhenderson@cityofflint.com>, Michael Glasgow <mglasgow@cityofflint.com>

Thank you. I would also like background on what is being asserted about corrosiveness of the Flint River water (even after treatment) and whether this is a problem for water quality, lead levels and pipe integrity, or not.

[Quoted text hidden]

**Howard Croft** <hcroft@cityofflint.com>

Mon, Aug 31, 2015 at 1:37 PM

To: Dayne Walling <dwalling@cityofflint.com>

Cc: Natasha Henderson <nhenderson@cityofflint.com>, Michael Glasgow <mglasgow@cityofflint.com>

Mayor,

We have procured a project summary from Virginia Tech that chronicles their objectives. The focal point is certainly Flint water but as I read through the summary, the meat of the task seems to addresses a larger, national issue with antiquated infrastructure. Our position would be to support the study and to hopefully highlight the path that we have been on to design an engineered plan of how to address the issues. It is important to note that we have actively requested and pursued having residents get their water tested and that we procured an independent testing agency to expand our capacity to do so.

What an upcoming article could fail to report is the work that we have already done to address infrastructure concerns on a large scale (Master Plan, 10-year rate Study, 5-year CIP). Mike Glasgow and I have discussed working to be more proactive in addressing lead concerns and this will include recommendations from the EPA and action items to follow. This would be a good topic to try and get in front of with the Technical Advisory group that I have intended to convene sometime in September.

This also falls in line with the \$ 3 million grant that is being pursued by the U of M Flint for a similar but much broader study that would begin next year.

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**Rapid Proposal Final.pdf**

220K

**Michael Glasgow** <mglasgow@cityofflint.com>

Mon, Aug 31, 2015 at 4:09 PM

To: Howard Croft <hcroft@cityofflint.com>

The data you received from Mr. Guyette is the same info I come up with via the web site.

Here is our data from DEQ: In our 2014 sampling for lead & copper (100 samples) the 90th percentile was 6 ppb, with 2 samples over the action level of 15 ppb. 2015 monitoring (69 samples) resulted in a 90th percentile of 11 ppb, with 6 samples over the action level.

In our last communication from DEQ, which was received the end of last week states that even though we are in compliance, our corrosion control is "not optimized" and they recommend the addition of phosphate as a corrosion inhibitor, and it must be implemented in by January of 2016. We originally had this chemical in the design, but the DEQ did not mandate it from the start, they informed us to wait and see the results of our lead and copper sampling to determine if it was necessary. I gave LAN a heads up over a couple of months ago to be ready to design the phosphate chemical feed system.

On Mon, Aug 31, 2015 at 12:05 PM, Howard Croft <hcroft@cityofflint.com> wrote:

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Mike Glasgow  
Utilities Administrator  
City of Flint  
1101 S. Saginaw St.  
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